additionally polymerize said monomer onto the monomolecular film except in the previously deactivated portion,

whereby a polymerized film is formed in a pattern.

2. The pattern forming method of claim 1, wherein the monomolecular film is formed so that the responsive groups may be exposed in line on the substrate surface by a Langmuir-Blodgett process or adsorption process.

3. The pattern forming method of claim 1, wherein a substance containing Si is used as the polymerizing monomer.

4. The pattern forming method of claim 3, wherein an organic photosensitive film is formed on the substrate, a polymerized film in a pattern is formed by a substance containing Si selectively, and oxygen plasma processing is conducted to transfer the pattern containing Si onto said organic film.

5. The pattern forming method of claim 1, wherein a vinyl group or ethynyl group is the responsive group or polymerizing group of the polymerizing monomer.

6. A pattern forming method comprising the steps of:

forming on a substrate a monomolecular film having responsive groups which undergo chemical vapor reactions under irradiation of an energy beam;

irradiating an energy beam in a pattern on said monomolecular film, thereby forming bonds between said responsive groups at the irradiated portion to selectively deactivate the responsive groups in the irradiated portion;

irradiating energy beams, in vacuum, onto the entire surface of the monomolecular film having the responsive groups deactivated in the pattern, to activate the responsive groups not deactivated in the preceding step; and

introducing a polymerizing monomer gas onto the responsive film to polymerize said monomer onto the monomolecular film in an area other than said pattern irradiated portion, thereby forming a polymerized film in a pattern.

7. The pattern forming method of claim 6, wherein the monomolecular film is formed so that the responsive groups may be exposed in line on the substrate surface by a Langmuir-Blodgett process or adsorption process.

8. The pattern forming method of claim 6, wherein a substance containing Si is used as the polymerizing monomer.

9. The pattern forming method of claim 8, wherein an organic photosensitive film is formed on the substrate, a polymerized film in a pattern is formed by a substance containing Si selectively, and oxygen plasma processing is conducted to transfer the pattern containing Si onto said organic film.

10. The pattern forming method claim 6, wherein a vinyl group or ethynyl group is the responsive group and polymerizing group of the polymerizing monomer.

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